

REMARKS

By this amendment, claims 1, 4, and 16-17 have been amended. Claims 1-17 are pending in the application. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

Claim 4 has been amended to correct a typographical error.

On November 14, 2005, Applicants' representative conducted a telephonic interview with the Examiner. The following amendment substantially addresses those issues discussed in relationship to prior art (Geyer et al.) rejections. Agreement with respect to claims 1-17 was not reached.

Claims 1-5 and 16-17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Umeda (US 6,597,158). This rejection is respectfully traversed.

Claim 1 recites a power supply apparatus comprising, *inter alia*, "a first power supply circuit ... providing [a] first voltage to an output voltage terminal; and ... [a] second power supply circuit being controlled to be turned on and off; the first power supply circuit further detecting voltage at the output terminal and, when the second power supply circuit is inactivated, providing the first voltage based on said detecting" (emphasis added). Umeda does not disclose these limitations. To the contrary, Umeda discloses that "[t]he step-down DC/DC converter 1 and the series regulator 2 are selectively operated based on a light load judging signal S1." Col. 3, ln. 13-15. There is no first power supply circuit detecting voltage at the output terminal and providing the first voltage based on said detecting as recited in claim 1. Since Umeda does not disclose all the limitations of claim 1, claim 1 and dependent claims 2-5 are not anticipated by Umeda.

Claim 16 recites a power supplying method for supplying voltage at an output voltage terminal comprising, *inter alia*, “in response to sensing a voltage at an output voltage terminal, converting the source voltage into a first voltage and providing the first voltage to the output terminal; and in response to a control signal, converting the source voltage into a second voltage and providing the second voltage to the output terminal; the first voltage being provided to the output terminal when the second voltage is not sensed as being provided to the output terminal” (emphasis added).

Umeda does not disclose these limitations. To the contrary, Umeda discloses that “[t]he step-down DC/DC converter 1 and the series regulator 2 are selectively operated based on a light load judging signal S1.” Col. 3, ln. 13-15. There is no first voltage being provided when the second voltage is not sensed as recited in claim 16. Since Umeda does not disclose all the limitations of claim 16, claim 16 is not anticipated by Umeda.

Claim 17 recites a power supply apparatus comprising, *inter alia*, “a first power supply circuit that ... provides the first voltage to an output voltage terminal ...; [a] second power supply circuit being controlled to be turned on and off; the first power supply circuit further detecting voltage at the output terminal and, when the second power supply circuit is detected as inactivated, providing the first voltage” (emphasis added). Umeda does not disclose these limitations. To the contrary, Umeda discloses that “[t]he step-down DC/DC converter 1 and the series regulator 2 are selectively operated based on a light load judging signal S1.” Col. 3, ln. 13-15. There is no first power supply circuit detecting voltage at the output terminal and, when the second power supply circuit is detected as inactivated, providing the first voltage as recited in claim 17. Since Umeda does not disclose all the limitations of claim 17, claim 17 is not anticipated by Umeda.

Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of claims 1-5 and 16-17 be withdrawn.

Claims 1, 2, and 16 stand rejected under 35 U.S.C. §102(b) as being anticipated by Geyer et al. (US 6,249,110). This rejection is respectfully traversed.

Claim 1 recites a power supply apparatus comprising, *inter alia*, "a first power supply circuit ... providing [a] first voltage to an output voltage terminal; and ... [a] second power supply circuit being controlled to be turned on and off; the first power supply circuit further detecting voltage at the output terminal and, when the second power supply circuit is inactivated, providing the first voltage based on said detecting" (emphasis added). Geyer et al. does not disclose these limitations.

To the contrary, Geyer et al. discloses that "potential difference must be established between the output voltages of in-phase regulator LR and the switched-mode regulator. This potential difference is maintained when an in-phase regulator with a 5 V output is used and the control voltage of switched-mode regulator SR is set at 5.3 V. Then in the normal case, the output voltage is 0.3 V higher than the control voltage of in-phase regulator LR." Col. 3, ln. 12-20. The difference in output voltages is predetermined when the control voltages of the LR and SR circuits are preset when the circuit is initially configured. See Col. 3, ln. 12-20.

Applicants respectfully submit that there is no first power supply circuit detecting voltage at the output terminal and providing the first voltage based on said detecting in combination with a second power supply circuit being controlled to be turned on and off as recited in claim 1. Since Geyer et al. does not disclose all the limitations of claim 1, claim 1 and dependent claim 2 are not anticipated by Geyer et al.

Claim 16 recites a power supplying method for supplying voltage at an output voltage terminal comprising, *inter alia*, “in response to sensing a voltage at an output voltage terminal, converting the source voltage into a first voltage and providing the first voltage to the output terminal; and in response to a control signal, converting the source voltage into a second voltage and providing the second voltage to the output terminal; the first voltage being provided to the output terminal when the second voltage is not sensed as being provided to the output terminal” (emphasis added). Geyer et al. does not disclose these limitations.

To the contrary, Geyer et al. discloses that “potential difference must be established between the output voltages of in-phase regulator LR and the switched-mode regulator. This potential difference is maintained when an in-phase regulator with a 5 V output is used and the control voltage of switched-mode regulator SR is set at 5.3 V. Then in the normal case, the output voltage is 0.3 V higher than the control voltage of in-phase regulator LR.” Col. 3, ln. 12-20. The difference in output voltages is predetermined when the control voltages of the LR and SR circuits are preset when the circuit is initially configured. See Col. 3, ln. 12-20.

Applicants respectfully submit that there is no first voltage being provided when the second voltage is not sensed as recited in claim 16. Moreover, the sensed output voltage is not disclosed in combination with converting the source voltage into a second voltage in response to a control signal, as further recited in claim 16. Since Geyer et al. does not disclose all the limitations of claim 16, claim 16 is not anticipated by Geyer et al.

Claim 17 recites a power supply apparatus comprising, *inter alia*, “a first power supply circuit that ... provides the first voltage to an output voltage terminal ...; [a] second power supply circuit being controlled to be turned on and off; the first power

supply circuit further detecting voltage at the output terminal and, when the second power supply circuit is detected as inactivated, providing the first voltage” (emphasis added). Geyer et al. does not disclose these limitations.

To the contrary, Geyer et al. discloses that “potential difference must be established between the output voltages of in-phase regulator LR and the switched-mode regulator. This potential difference is maintained when an in-phase regulator with a 5 V output is used and the control voltage of switched-mode regulator SR is set at 5.3 V. Then in the normal case, the output voltage is 0.3 V higher than the control voltage of in-phase regulator LR.” Col. 3, ln. 12-20. The difference in output voltages is predetermined when the control voltages of the LR and SR circuits are preset when the circuit is initially configured. *See* Col. 3, ln. 12-20.

Applicants respectfully submit that is no first power supply circuit detecting voltage at the output terminal and, when the second power supply circuit being controlled to be turned on and off is detected as inactivated, providing the first voltage as recited in claim 17. Since Geyer et al. does not disclose all the limitations of claim 17, claim 17 is not anticipated by Geyer et al.

Applicants respectfully request that the 35 U.S.C. §102(b) rejection of claims 1, 2, and 16 be withdrawn.

Claims 6-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Umeda in view of Hiraki et al. (US 2002/0041178). This rejection is respectfully traversed. Claims 6-7 depend on claim 1 and should be allowable along with claim 1 and for other reasons. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 6-7 be withdrawn.

Claims 6-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Geyer et al. in view of Hiraki et al. This rejection is respectfully traversed. Claims 6-7 depend on claim 1 and should be allowable along with claim 1 and for other reasons. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 6-7 be withdrawn.

Claims 8-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Umeda in view of Hiraki et al. This rejection is respectfully traversed. Claims 8-9 depend on claim 1 and should be allowable along with claim 1 and for other reasons. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 8-9 be withdrawn.

Claims 8-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Geyer et al. in view of Hiraki et al. This rejection is respectfully traversed. Claims 8-9 depend on claim 1 and should be allowable along with claim 1 and for other reasons. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 8-9 be withdrawn.

Claims 10-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Umeda in view of Manabe et al. (US 6,236,194), and further in view of Pizzi et al. (US 5,258,701). This rejection is respectfully traversed. Claims 10-11 depend on claim 1 and should be allowable along with claim 1 and on their own merits. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 10-11 be withdrawn.

Claims 10-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Geyer et al. in view of Manabe et al., and further in view of Pizzi et al. This rejection is respectfully traversed. Claims 10-11 depend on claim 1 and should be allowable along

with claim 1 and on their own merits. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 10-11 be withdrawn.

Claims 12-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Umeda in view of Manabe et al., and further in view of Pizzi et al. This rejection is respectfully traversed. Claims 12-15 depend on claim 1 and should be allowable along with claim 1 and on their own merits. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 12-15 be withdrawn.

Claims 12-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Geyer et al. in view of Manabe et al., further in view of Pizzi et al., and further in view of Hiraki et al. This rejection is respectfully traversed. Claims 12-15 depend on claim 1 and should be allowable along with claim 1 and on their own merits. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 12-15 be withdrawn.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Dated: March 23, 2006

Respectfully submitted,

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